Luigi Rizzi   CRISSP 10
University of Geneva – University of Siena   Brussels, Dec 15, 2016

Intervention Locality in grammar and language acquisition.

Intervention effects are found in at least three domains of research focusing on natural language syntax:
1. **Degraded acceptability in weak island contexts:** extracting an element from a weak island, such as an indirect question, gives rise to structures which are perceived as deviant; the degree of deviance varies depending on the nature of the extracted element and of the extraction environment (see Villata, Franck, Rizzi 2015 for recent discussion).
2. **Incapacity to compute intervention configurations** in object A'-dependencies for children: e.g., Friedmann, Belletti, Rizzi 2009 on certain object relatives and object questions, and much related work (and also in different forms of language-related pathologies: Grillo 2008));
3. **Slower processing** in adults, manifested by much work in experimental psycholinguistics (e.g., in terms of reading time: Gordon et al 2001, 2002).

An important question that these empirical observations raise is the following: Are intervention effects in these domains amenable to a unified formal approach?
In recent years, this question has been addressed within the Relativized Minimality (RM) tradition (Rizzi 1990) by working out a detailed version of featural RM (based on ideas in Starke 2001), originally motivated by the acceptability effects in weak island environments, and extending it, *mutatis mutandis*, to the other domains. The key concept of the approach is that the problematic nature of an intervention configuration is related to the constitution of the target and of the intervener in terms of relevant morphosyntactic features. Different degrees of feature match between the intervener and the target give rise to different degrees of disruption.

The unified approach must address important problems because the crucial environments in 1, 2, 3 do not fully correspond; in particular:
a. Object questions and object relatives across a lexically restricted subject are fully acceptable for adults, but raise insurmountable problems for young children.
b. Some configurations with partial featural match are fully acceptable for adults, while other such configurations are perceived as deviant.
We would like to address these questions by assuming a single locality principle which evaluates intervention configurations against a hierarchy of featural distinctness. The hierarchy is based on the set-theoretic relations between the featural specifications of the target and the intervener (disjunction, intersection, inclusion, identity), ranging from a maximum to a minimum of distinctness. This unified principle admits distinct cut-off points, responsible for the different manifestations of intervention locality mentioned at the outset.

In the final part of the paper we will review and discuss empirical arguments supporting our grammar-based approach over extra-grammatical approaches to the development of complex A'-constructions.